

In the Claims

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Please cancel claims 5 - 8, 15, 23, 25 - 35 and 37.

Please amend claims 1, 4, 16 - 20, 22, 24 and 36 as follows:

A1 C1
1. (Amended)

A method of increasing or inducing cold or freezing tolerance in rosacea species plant, gramineae species plant or grass plant, which comprises the following steps:

- a) acclimating said plant to a temperature not lower than the coldest temperature that said plant is capable of withstanding, for a time sufficient to induce cold or freezing tolerance in said plant, and
- b) increasing the concentration of betaine or a derivative thereof to a non toxic concentration in said plant to induce cold or freezing tolerance in said plant;

whereby combined steps a) and b) increase or induce cold or freezing tolerance of said plant over and above the cold or freezing tolerance of the normal genotypic potential induced by each step alone.

A2 C1
4. (Amended)

A method as set forth in claim 1, wherein the step of increasing the concentration of betaine or a derivative thereof includes overexpressing one or more genes involved in the synthesis of betaine or a derivative thereof selected from the group consisting of betaine dehydrogenase and choline monooxygenase.

A3
16. (Amended)

A method as set forth in claim 1, wherein said plant is selected from the group consisting of roses, strawberry, golf turf, barley and wheat.

17. (Amended)

A method as set forth in claim 1, wherein said plant comprises golf turf.

18. (Amended)

A method as set forth in claim 3, wherein said composition comprises glycine betaine at a concentration lower than about 500mM.

19. (Amended)

A method as set forth in claim 12, wherein said glycine betaine is present at a concentration of about 250 mM.

A3
amended

20. (Amended)

A method as set forth in claim 13, wherein said compound is present at a concentration of about 250 mM.

A4

22. (Amended)

A method as set forth in claim 20, wherein the increase in freezing tolerance is by at least about 6°C.

A5

24. (Amended)

A method as set forth in claim 1, which further results in improving regrowth, greening and resistance to photoinhibition of said rosacea species, gramineae species and grasses at cold or freezing temperatures of about 6°C to about -17°C.

A6

36. (Amended)

A method as set forth in claim 1, wherein said freezing tolerance comprises about an optimal freezing tolerance.

Please add the following new claims:

A7

38. (New)

A method as set forth in claim 1, wherein said acclimation temperature and said coldest temperature that said rosacea species, gramineae species and grasses are capable of withstanding is between 6°C to about -17°C.

39. (New)

A method as set forth in claim 1, wherein said gramineae species and grasses are selected from a group of gramineae species and grasses sensitive to temperatures between 6°C to about -17°C.